

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows.

On page 1, before paragraph [0001], insert the following:

BACKGROUND OF THE INVENTION

Related Applications

On page 1, between paragraphs [0001] and [0002], insert the following:

BRIEF DESCRIPTION OF THE FIGURES

FIG. 1 illustrates a high-level block diagram of a wireless data communication system incorporating a subtracter.

FIG. 2A illustrates a signal map of in-phase (I) and quadrature-phase (Q) inputs to a symbol decoder in an “ideal” or theoretical system.

FIG. 2B illustrates a signal map of I and Q inputs to a symbol decoder in the presence of direct current (DC) offsets.

FIG. 3 illustrates a block diagram of a receiver incorporating a DC component subtracter.

DETAILED DESCRIPTION

On page 2, replace paragraph [0005] with the following substitute paragraph:

[0005] At the receiver 14, the transmitted signal is received by an antenna 60, which feeds the received signal into a low noise amplifier (LNA) 62, the output of which is connected to a mixer 64, also known as a demodulator. The mixer 64 includes a multiplier 66 and oscillator 68 arranged to produce quadrature output signals on lines 70 and 72. The signals on lines 70 and 72 are connected to a filter and automatic gain control (AGC) 74. The filter and AGC unit 74 automatically adjusts the gain applied to the output signals from the AGC

74 as a function of the strength of the modulated carrier received via antenna 60, in order to maintain a relatively constant output signal level.

On page 8, replace paragraph [0017] with the following substitute paragraph:

[0017] A communications system receiver ~~has a demodulator having an output and a time-averaged DC component subtracter unit coupled to the output of said demodulator to subtract a time-averaged DC offset component from the signal at the output of the demodulator.~~
incorporates a time-averaged DC component subtracter to subtract a time-averaged DC offset component from a received, processed signal. The time-averaged DC offset component is calculated as an average updated periodically over successive predetermined time intervals, or as a running average over a predetermined number of preceding average calculated values.